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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,664

10/13/2006

Bob Coyne

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27890

7590

06/03/2010

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EXAMINER

PADEN, CAROLYN A

ART UNIT

PAPER NUMBER

1781

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,664	Applicant(s) COYNE ET AL.	
	Examiner Carolyn A. Paden	Art Unit 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25,27,28 and 32-57 is/are pending in the application.
- 4a) Of the above claim(s) 46-57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25,27,28 and 32-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :9-17-09;5-14-09; 2-12-09; 9-12-08; 5-6-08; 1-24-08; 10-24-07; 10-4-07; 6-28-06.

Applicant's election without traverse of Group I in the reply filed on April 1, 2010 is acknowledged. Applicant further elected fats as the species.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 8, 13-16, 18-20, 25, 27-28, 32, 37, 40, 41 and 45 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morgan (5,204,029).

Morgan discloses encapsulating liquids in fatty matrices. Here a shell of fats is prepared. The fats are solid fats having a melting point of 110F to 195F, as required in claim 1 (column 4, lines 63-64). The fats can be selected from any of the fats shown at column 3, lines 39-60. These fats

and oils are generally known in the art to be triglycerides. The materials in the core can include any of a variety of ingredients shown in column 5.

Antimicrobial agents and antimycotic agents are especially mentioned at column 5, lines 38-39. The shell selected is a triglyceride shell and would be expected to have all of the properties of claims 13-16 and 18-20, 25, 27-28.

Claims 1, 4, 8, 9, 11, 13-16, 18-20, 25, 27-28, 32, 37, 39-43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (5,204,029).

Morgan discloses encapsulating liquids in fatty matrices. Here a shell of fats is prepared. The fats are solid fats having a melting point of 110F to 195F, as required in claim 1 (column 4, lines 63-64). The fats can be selected from any of the fats shown at column 3, lines 39-60. These fats and oils are generally known in the art to be triglycerides. The materials in the core can include any of a variety of ingredients shown in column 5. Antimicrobial agents and antimycotic agents are especially mentioned at column 5, lines 38-39. The shell selected is a triglyceride shell and would be expected to have all of the properties of claims 13-16 and 18-20, 25, 27-28. The claims appear to differ from Morgan in the recitation of an example

where an anti-microbial agent is used as a core. Given the wide variety of choices of cores available at column 5, it would have been obvious to encapsulate an antimicrobial agent for use in food as an obvious way to enhance the shelf-life of the food. Water would be expected to be the carrier for the core ingredients (column 5, line 2). It is appreciated that the density of the carrier is not mentioned but no unobvious or unexpected difference is seen between the densities of the ingredients in Morgan since the carrier appears to be water. No unobvious or unexpected result is seen from the selection of brominated oil as an oil source in Morgan. It is appreciated that the specific bactericidal effect of claim 11 is not mentioned but it would have been obvious to modify the encapsulating composition of Morgan to include a specific desired bactericidal agent.

Claims 1-3, 5-10, 21-25, 27, 28, 32, 33 and 37 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Francis.

Morgan discloses encapsulating liquids in fatty matrices. Here a shell of fats is prepared. The fats are solid fats having a melting point of 110F to 195F, as required in claim 1 (column 4, lines 63-64). The fats can be selected from any of the fats shown at column 3, lines 39-60. These fats

and oils are generally known in the art to be triglycerides. The materials in the core can include any of a variety of ingredients shown in column 5.

Citric acid is shown at line 24. Antimicrobial agents and antimycotic agents are especially mentioned at column 5, lines 38-39. The claims appear to differ from Morgan in the recitation of the specific inclusion of an antimicrobial agent that is an anti-bacterial material. Francis teaches that Nisin is known in the art as an antimicrobial agent that acts as a preservative by inhibiting the outgrowth of gram positive bacteria (page 68, column 2, first full paragraph). The specific microorganisms controlled by nisin are in the species mentioned in claims 11 and 12. It would have been obvious to one of ordinary skill in the art to utilize the nisin of Francis as the microbial agent in Morgan to form the core of a preservative for foods. It is appreciated that the properties of the shell set forth in claims 22-25 are not mentioned but one of ordinary skill in the art would expect the shell to have these properties because of the selected triglyceride shell. It is appreciated that the particle size of the encapsulated material is not mentioned.

Morgan mentions a particle size of 425 microns in example 1 in free flowing powder form. No unobvious or unexpected result is seen from the

difference in the particle size of Morgan versus that of the claims because the final product is still in particulate form.

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan as applied to the claims above, and further in view of Amankonah (5,516,543).

The claims appear to differ from Morgan in the recitation of the inclusion of Xanthan gum. Amankonah teaches that gellan gum modified with Xanthan gum and coated with fat can be used for its texture as a fat replacer or fat extender (abstract, column 2, line 42 and column 3, lines 1-6). In example 1, anti-mycotic agents are added to the gellan solution before adding the oil in the preparation of the microparticles. It would have been obvious to one of ordinary skill in the art to include gellan gum and Xanthan gum in the encapsulated products of Morgan to optimize the taste or texture of the encapsulated antimicrobial material.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9, 12, 17, 25, 27, 28 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Berggren (0687417).

Berggren discloses inhibition of bacterial growth in meat products with an encapsulated product in particulate form comprising capsules containing acetic acid with fat (abstract). The melting point of the fat is stated to fall within the range of the claims (page 3, lines 1-7). The encapsulated product is added to ham with brine, which examiner takes to be a marinade in example 1.

Claims 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berggren (0687417) .

Berggren discloses inhibition of bacterial growth in meat products with an encapsulated product in particulate form comprising capsules containing acetic acid with fat (abstract). The melting point of the fat is stated to fall within the range of the claims (page 3, lines 1-7). The encapsulated product is added to ham with brine, which examiner takes to be a marinade in example 1. The claims appear to differ from Berggren in the recitation of the inclusion of a chelator in the encapsulated antimicrobial material. Berggren contemplates including citric acid in the encapsulate at page 2, lines 48-49 and applicant defines citric acid as a chelator in claim

34. Although the extent of antimicrobial activity is not mentioned, organic acids, are known in the art to possess antimicrobial activity (page 2, lines 10-14 of Berggren). It would have been obvious to one of ordinary skill in the art to expect the citric acid in the encapsulate composition of Berggren to provide antimicrobial activity to the encapsulate composition of Berggren.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn A Paden whose telephone number is (571) 272-1403. The examiner can normally be reached on Monday to Friday from 7 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached by dialing 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Carolyn Paden/

Primary Examiner 1781

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